

Claims

1. Ferritic steel alloy characterised in that it has the following composition (in % by weight):

5

less than 1 % of Ni,

15–25 % of Cr,

4,5–12 % of Al,

0,5–4 % of Mo,

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0,01–1,2 % of Nb,

0–0,5 % of Ti,

0–0,5 % of Y, Sc, Zr and/or Hf,

0–0,2 % of one or more rare earth metals (REM) such as,
for instance, Ce or La,

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0–0,2 % of C,

0–0,2 % of N,

with the balance iron and normally occurring impurities.

2. Ferritic steel alloy according to claim 1 characterised in that Mo entirely
20 or partly is replaced by W.

3. Ferritic steel alloy according to claims 1 or 2 characterised in that it
contains one or more rare earth metals (REM).

25 4. Ferritic steel alloy according to claim 1 characterised in that it contains at
least 0,1 % in total of Ti, Nb, Zr and/or Hf.

30 5. Method of producing a ferritic steel alloy according to any of claims 1 to 4
characterised in coating a substrate alloy with Al or an alloy of Al, the
substrate alloy having the following composition (in % by weight):

less than 1 % of Ni,

15–27 % of Cr,

0–5 % of Al,
0,5–5 % of Mo,
0,01–2 % of Nb,
0–0,5 % of Ti,
5 0–0,5 % of Y, Sc, Zr and/or Hf,
0–0,2 % of one or more rare earth metals (REM) such as,
for instance, Ce or La,
0–0,2 % of C,
0–0,2 % of N,
10 with the balance iron and normally occurring impurities.

6. Product in the form of wire, strip, foil and/or tube for use in high-temperature applications characterised in that it is produced from a ferritic steel alloy according to any one of claims 1 to 4.

15 7. Use of a ferritic steel alloy according to any of claims 1 to 4 as supporting material in catalytic converter applications.

20 8. Use of a ferritic steel alloy according to claims 1 to 4 in heating and furnace applications.